

Notice of Allowability

Application No.

09/742,250

Examiner

Linh V. Nguyen

Applicant(s)

WERNER ET AL.

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/17/07.
2. ☒ The allowed claim(s) is/are 7-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This office action is in response to communication filed on 7/27/06. Claims 7 – 10 and 21 have been amended. Claims 1 – 6 have been canceled. Claims 7 – 23 are pending on this application.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Page 1 of the specification, on line 2 of "CROSS REFERENCE TO RELATED APPLICATION" section, after "09/655,010" inserts - - (US patent No. 6,772,351) - -

On page 7 of the specification, on line 12, changes "5B is" to - - 5B and 5C are - -

Allowable Subject Matter

3. Claims 17 - 23 are allowed.

4. The following is an examiner's statement of reasons for allowance:

With respect to claim 7, in addition to other element in the claim, prior art considered individual or combination does not teach or suggest a method for improving resolution of a current mode driver comprising: applying a PVT independent current to a PVT sensitive load; and detecting a voltage drop across the PVT sensitive load.

With respect to claim 8, in addition to other element in the claim, prior art considered individual or combination does not teach or suggest a method for improving resolution of a current mode driver comprising: applying a pulse in parallel to a delay line and a first plurality of latches, wherein the delay lines comprises a second plurality of delay stages; coupling an output of a subset of the plurality of delays stages to an input of a corresponding latch.

With respect to claim 11, in addition to other elements in the claim, the prior art does not teach or suggest a current output driver having: applying the current control signal to cause the output driver to sink a second current; wherein the second current is less than the full scale current; and applying a second current adjustment signal to alter the second current of the output driver; and calibrating the altered full scale current of the output driver and the altered second current of the output driver by comparing the altered full scale current with a first reference and comparing the altered second current with a second reference.

With respect to claim 15, in addition to other element in the claim the prior art does not teach or suggest a current mode driver, comprising the steps of: applying the first output as a gate voltage to control a full scale current of an output driver DAC calibrating the output driver by comparing a second output, which is provided by the output driver, with a reference; and augmenting the first current control signal when the second output differs from the reference.

With respect to claim 21, in addition to other element in the claim, prior art considered individual or combination does not teach or suggest a method for improving

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resolution of a current mode driver comprising: the multi-PAM signal generator uses pulses having a plurality of sets of signal amplitudes to encode signals, and wherein a respective set of signal amplitudes in the plurality of sets of signal amplitudes has at least two signal levels.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (571) 272-1810. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Rexford Barnie can be reached at (571) 272-7492. The fax phone numbers for the organization where this application or proceeding is assigned are (571-273-8300) for regular communications and (571-273-8300) for After Final communications.


7/27/06

**LINH NGUYEN
PRIMARY EXAMINER**